

RECEIVED  
CENTRAL FAX CENTER

DEC 28 2006

**In the Claims**

Please amend claims 18 and 20-21 as follows. Please cancel claim 25 without prejudice.

1-17. (Canceled)

18. (Currently amended) A device for determining the presence of a nucleic acid in a sample comprising  
an instrument for temperature cycling for analysis of real-time amplification of the nucleic acid,

a fluorimeter for detecting fluorescence during the amplification of the nucleic acid, the fluorescence obtained from a fluorescent entity capable of providing a signal related to the quantity of the nucleic acid, and

a processor for performing analysis routines, wherein the processor is programmed i) to initiate analysis algorithms ~~using~~ by inputting into the algorithms fluorescence values measured by the fluorimeter prior to completion of temperature cycling, ii) to ~~use~~ initiate a first algorithm to obtain a first score from a first test ~~using~~ by inputting into the first algorithm the fluorescence values and, iii) to initiate a second algorithm to obtain a second score from a second test ~~using~~ by inputting into the second algorithm the fluorescence values, ~~and iii) to use the first score and the second score~~ iv) to generate a composite score by evaluating a function that depends on the first score and the second score as independent variables of the function, and v) to determine whether the sample is positive, negative, or indeterminate for the presence of the nucleic acid.

19. (Previously presented) The device of claim 18 wherein the first test is a Confidence Interval Test and the second test is a Signal-to-Noise Ratio Test.

20. (Currently amended) The device of claim ~~19~~ 18 wherein the first test is a Channel Consistency Test and the second test is an Efficiency Test.

21. (Currently amended) The device of claim ~~20~~ 18 wherein the first test is a Function Ordering Test, the second test is a Maximum to Baseline Comparison Test, and the processor is further programmed to ~~use~~ obtain a score from a Last Rise Test.

22. (Original) The device of claim 18 wherein the instrument is configured for rapid thermal cycling.

23. (Original) The device of claim 22 wherein the instrument employs capillary tubes and hot air control.

24. (Withdrawn) The device of claim 18 provided in a portable container for field use.

25. (Canceled)

Please add new claim 26 as follows.

26. (New) The device of claim 18 wherein the processor is further programmed to determine whether the sample is positive or negative for the presence for the nucleic acid.